

CLAIM AMENDMENTS

Please amend Claim 14 and add new Claim 18 as follows:

1. - 13. (Cancelled)

14. (Currently Amended) A driving method for a CMOS type image pickup device having pixels each including a photoelectric conversion unit, and having a transfer MOS transistor for transferring photoelectric conversion signal charges generated by said photoelectric conversion unit to a floating diffusion ~~unit~~ region at an input terminal of an amplifier element, wherein the image pickup device includes signal lines outputting the amplified signal to a capacitor arranged at each signal line, ~~and a switch element for controlling electric continuity of the signal line and the capacitor,~~ the driving method comprising:

a driving step comprising at least a first and a second transfer step,
said first transfer step being performed for of applying a ~~plurality of~~ pulses to the transfer switch to transfer a part of the signal charges generated by said photoelectric conversion unit to the floating diffusion region, and said second transfer step being performed,
subsequently to said first transfer step, for applying a pulse to the transfer switch to transfer the other part of the signal charges generated by said photoelectric conversion ~~to~~ unit to the floating diffusion region, before reading out a signal from the pixel to the signal line, wherein no reset of the floating diffusion region is performed between the first and second transfer steps of the signal charges.

15. (Cancelled)

16. (Previously Presented) The driving method according to Claim 14, wherein the driving step includes a step of resetting the input terminal of the amplifier element and outputting a reset signal generated from the amplifier element upon the resetting, and a step of outputting a photoelectric conversion signal from the amplifier element, and wherein the driving method further comprises a step of subtracting the reset signal from the photoelectric conversion signal.

17. (Previously Presented) The driving method according to Claim 14, wherein the photoelectric conversion signal and the reset signal include correlated signals.

18. (New) A driving method for a CMOS type image pickup device having pixels each including a photoelectric conversion unit, and having a transfer MOS transistor for transferring photoelectric conversion signal charges generated by said photoelectric conversion unit to a floating diffusion region at an input terminal of an amplifier element, wherein the image pickup device includes signal lines outputting the amplified signal to a capacitor arranged at each signal line, the driving method comprising:
a driving step comprising at least a first and a second transfer step, said first transfer step being performed for applying a pulse to the transfer switch to transfer an already accumulated substantial part of the signal charges generated by said photoelectric conversion unit to the floating diffusion region, and said second transfer step being performed, subsequently to first transfer step, for applying a pulse to the transfer switch to transfer the remaining part of the signal charges generated by said photoelectric conversion unit to the floating diffusion region, before reading out a signal from the pixel to the signal line, wherein no reset of the floating diffusion region is performed between the first and second transfer step of the signal charges, and during a time period between the first and

second transfer steps, there is no effective quantity of light incident on the photoelectric conversion unit.